

Appendix 5A: Eligible diagnostic randomized controlled trials and study populations' characteristics.

Trial or first author	Age 1	Age 2	Age 3	Males 1	Males 2	Males 3	HTN 1	HTN 2	HTN 3	DM 1	DM 2	DM 3	Dysli 1	Dysli 2	Dysli 3	Smok 1	Smok 2	Smok 3	FHx CAD 1	FHx CAD 2	FHx CAD 3
Low-risk acute coronary syndrome																					
BEACON ⁴¹	55±10	53±11	na	127 (51)	137 (55)	na	109 (43)	112 (45)	na	31 (12)	33 (13)	na	90 (36)	87 (35)	na	93 (37)	78 (31)	na	112 (45)	98 (39)	na
Levsky JM., et al ⁴²	57±12	56±11	na	74 (37)	75 (48)	na	141 (71)	147 (74)	na	66 (33)	61 (31)	na	97 (49)	109 (55)	na	33 (17)	26 (13)	na	75 (38)	73 (37)	na
CT-COMPARE ⁴³	52±11	52±10	na	182 (59)	140 (58)	na	99 (31)	74 (31)	na	23 (7)	15 (6)	na	81 (25)	57 (24)	na	77 (24)	55 (23)	na	106 (33)	80 (33)	na
CATCH ^{44,45}	56±12	55±12	na	271 (56)	168 (58)	na	135 (47)	106 (36)	na	35 (12)	29 (10)	na	117 (41)	101 (35)	na	172 (60)	195 (67)	na	69 (24)	76 (26)	na
Lim SH., et al. ⁴⁶	52±12	52±13	na	676 (60)	321 (57)	na	431 (38)	197 (35)	na	180 (16)	90 (16)	na	nd	nd	na	331 (29)	156 (28)	na	nd	nd	na
Miller CD., et al. ⁴⁷	54 (35-91)	59 (40-76)	na	28 (54)	29 (55)	na	37 (71)	45 (85)	na	16 (31)	16 (30)	na	33 (63)	39 (74)	na	21 (40)	20 (38)	na	nd	nd	na
ROMICAT-II ⁴⁸	54±8	54±8	na	261 (52)	269 (54)	na	269 (54)	272 (54)	na	86 (17)	87 (17)	na	230 (46)	224 (45)	na	249 (50)	243 (49)	na	135 (27)	136 (27)	na
ACRIN-PA ^{37,38}	49±9	50±10	na	443 (49)	202 (44)	na	463 (51)	232 (50)	na	130 (14)	64 (14)	na	249 (27)	118 (26)	na	291 (32)	156 (34)	na	268 (30)	126 (27)	na
CT-STAT ⁴⁹	50±10	50±10	na	163 (45)	159 (47)	na	128 (36)	131 (39)	na	20 (6)	28 (8)	na	112 (31)	122 (36)	na	91 (25)	66 (20)	na	111 (31)	101 (30)	na
Miller AH., et al. ⁵⁰	51±10	51±10	na	13 (43)	17 (57)	na	nd	nd	na	nd	nd	na	nd	nd	na	nd	nd	na	nd	nd	na
Miller CD., et al. ^{51,52}	55 (48-62)	57 (47-64)	na	24 (46)	30 (53)	na	35 (67)	43 (75)	na	19 (37)	23 (40)	na	38 (73)	44 (77)	na	18 (35)	18 (32)	na	nd	nd	na
Nucifora G., et al. ⁵³	52±10	50±10	56±14	41 (53)	51 (68)	30 (55)	29 (38)	26 (35)	27 (49)	9 (12)	5 (7)	6 (11)	29 (38)	20 (27)	22 (40)	37 (48)	33 (44)	27 (49)	nd	nd	nd
Chang SA., et al. ⁵⁴	57±14	58±14	na	81 (61)	82 (62)	na	61 (46)	54 (41)	na	21 (16)	25 (19)	na	39 (29)	33 (25)	na	nd	nd	na	16 (12)	17 (13)	na
Goldstein JA., et al. ⁵⁵	48±11	51±12	na	42 (43)	56 (57)	na	38 (39)	37 (38)	na	8 (8)	12 (12)	na	33 (34)	37 (38)	na	15 (15)	20 (20)	na	39 (40)	43 (44)	na
Jeetley P., et al. ⁵⁶	61±13	60±12	na	121 (56)	125 (57)	na	65 (140)	133 (61)	na	49 (23)	53 (24)	na	113 (53)	134 (61)	na	85 (40)	102 (47)	na	95 (44)	104 (48)	na
Nucifora G., et al. ⁵⁷	52±10	51±11	na	57 (52)	61 (69)	na	37 (34)	30 (34)	na	9 (8)	7 (8)	na	36 (33)	25 (28)	na	48 (44)	37 (42)	na	nd	nd	na
Jeetley P., et al. ⁵⁸	61±13	60±13	na	84 (57)	87 (56)	na	103 (70)	95 (62)	na	34 (23)	39 (25)	na	81 (55)	100 (65)	na	56 (38)	76 (49)	na	71 (48)	73 (47)	na
Udelson JE., et	53±13	53±14	na	649	618	na	526	538	na	153	188	na	421	460	na	345	334	na	nd	nd	na

al.⁵⁹

(53) (49)

(43) (43)

(13) (15)

(35) (37)

(28) (26)

Stable coronary artery disease

IAEA-SPECT/CTA ⁶⁰	59±11	60±12	na	75 (49)	70 (46)	na	97 (64)	97 (64)	na	43 (28)	43 (29)	na	89 (59)	83 (55)	na	36 (24)	25 (17)	na	48 (32)	45 (30)	na
CE-MARC 2 ⁶¹	57±9	56±9	57±9	254 (53)	256 (53)	128 (53)	177 (37)	182 (38)	99 (41)	53 (11)	73 (15)	24 (10)	186 (39)	198 (41)	99 (41)	284 (59)	271 (56)	147 (61)	252 (54)	259 (54)	140 (58)
CRESCENT ³⁴	55±10	55±10	na	109 (45)	48 (44)	na	123 (52)	56 (52)	na	41 (17)	17 (16)	na	131 (54)	66 (61)	na	82 (34)	39 (36)	na	92 (38)	34 (37)	na
Zacharias K., et al. ⁶²	55±11	54±11	na	134 (70)	128 (66)	na	76 (40)	60 (31)	na	27 (14)	33 (17)	na	76 (40)	60 (31)	na	27 (14)	35 (18)	na	46 (24)	35 (18)	na
PROMISE ³⁵	60±8	61±8	na	2401 (48)	2332 (47)	na	3247 (65)	3254 (65)	na	1065 (21)	1079 (22)	na	3365 (67)	3402 (67)	na	2533 (50)	2571 (51)	na	1624 (32)	1578 (31)	na
SCOT-HEART ^{63,64}	57±10	57±10	na	1162 (56)	1163 (56)	na	712 (34)	683 (33)	na	223 (11)	221 (11)	na	1099 (53)	1077 (52)	na	1095 (53)	1090 (53)	na	887 (43)	829 (40)	na
Laiq Z., et al. ⁶⁵	58±12	58±12	na	353 (49)	369 (51)	na	936 (57)	na	386 (23)	na	785 (48)	na	363 (22)	na	1103 (67)	na					
CAPP ⁶⁶	58±10	59±10	na	138 (69)	131 (52)	na	77 (31)	73 (29)	na	14 (7)	12 (5)	na	nd	nd	na	46 (18)	47 (24)	na	nd	nd	na
Porter TR., et al. ⁶⁷	60±12	59±13	na	503 (49)	491 (47)	na	640 (62)	628 (61)	na	271 (26)	262 (25)	na	583 (57)	529 (51)	na	239 (23)	230 (22)	na	344 (33)	344 (33)	na
Min JK., et al. ⁶⁸	56±10	59±10	na	53 (58)	38 (43)	na	56 (62)	61 (59)	na	21 (23)	19 (21)	na	48 (53)	54 (61)	na	53 (58)	38 (44)	na	37 (41)	43 (48)	na
WOMEN ⁶⁹	62 (58-68)	63 (60-69)	na	0	824 (100)	na	200 (49)	227 (55)	na	55 (13)	49 (12)	na	206 (50)	194 (47)	na	163 (40)	189 (46)	na	176 (43)	184 (45)	na
Sabharwal NK., et al. ⁷⁰	60±12	60±11	na	139 (56)	119 (58)	na	133 (53)	96 (46)	na	48 (19)	30 (15)	na	nd	nd	na	22 (13)	30 (14)	na	108 (43)	96 (46)	na

Appendix 5B: Assessed outcomes and number of events.

Trial or first author	Comparisons	Group 1	Group 2	Group 3	Follow-up	ICA 1	ICA 2	ICA 3	Revasc 1	Revasc 2	Revasc 3	PCI 1	PCI 2	PCI 3	CABG 1	CABG 2	CABG 3
Low-risk acute coronary syndrome																	
BEACON ⁴¹	CCTA vs. standard care	250	250	na	1 mo	41	31	na	22	17	na	22	13	na	0	4	na
Levsky JM., et al. ⁴²	CCTA vs. SPECT-MPI	200	200	na	40 mo (median)	30	32	na	15	12	na	8	11	na	7	1	na
CT-COMPARE ⁴³	CCTA vs. exercise ECG	322	240	na	1 y	26	9	na	14	3	na	12	3	na	2	0	na
CATCH ^{44,45}	CCTA vs. standard care	299	301	na	19 mo (median)	49	36	na	29	12	na	25	8	na	4	4	na
Lim SH., et al. ⁴⁶	SPECT-MPI vs. standard care	1126	564	na	1 y	73	56	na	48	31	na	nd	nd	na	nd	nd	na
Miller CD., et al. ⁴⁷	CMR vs. standard care	52	53	na	3 mo	5	11	na	1	8	na	1	8	na	0	0	na
ROMICAT-II ⁴⁸	CCTA vs. standard care	501	499	na	28 days	59	40	na	32	21	na	27	17	na	5	4	na
ACRIN-PA ^{37,38}	CCTA vs. standard care	929	463	na	30 days	69	32	na	28	10	na	nd	nd	na	nd	nd	na
CT-STAT ⁴⁹	CCTA vs. SPECT-MPI	375	374	na	6 mo	26	22	na	14	8	na	10	8	na	4	0	na
Miller AH., et al. ⁵⁰	CCTA vs. standard care	30	30	na	3 mo	4	4	na	1	0	na	1	0	na	0	0	na
Miller CD., et al. ^{51,52}	CMR vs. standard care	52	57	na	1 y	8	19	na	2	5	na	1	5	na	1	0	na
Nucifora G., et al. ⁵³	Stress Echo vs. exercise ECG vs. standard care	77	75	55	2 mo	5	9	8	5	6	2	4	5	1	1	1	1
Chang SA., et al. ⁵⁴	CCTA vs. standard care	133	133	na	1 mo	47	57	na	26	28	na	nd	nd	na	nd	nd	na
Goldstein JA., et al. ⁵⁵	CCTA vs. standard care	99	98	na	6 mo	12	7	na	6	1	na	4	1	na	2	0	na

Jeetley P., et al. ⁵⁶	Stress Echo vs. exercise ECG	215	218	na	9 mo (median)	41	72	na	24*	30*	na	16*	24*	na	8*	6*	na
Nucifora G., et al. ⁵⁷	Stress Echo vs. exercise ECG	110	89	na	2 mo	6*	6*	na	6*	6*	na	5*	5*	na	1*	1*	na
Jeetley P., et al. ⁵⁸	Stress Echo vs. exercise ECG	148	154	na	9 mo (mean)	21	36	na	16	22	na	nd	nd	na	nd	nd	na
Udelson JE., et al. ⁵⁹	SPECT-MPI vs. standard care	1215	1260	na	1 mo	156	162	na	63	77	na	46	50	na	18	30	na

Stable coronary artery disease																	
IAEA-SPECT/CTA ⁶⁰	CCTA vs. SPECT-MPI	152	151	na	12 mo	21	18	na	8	10	na	nd	nd	na	nd	nd	na
CE-MARC 2 ⁶¹	CMR vs. SPECT-MPI vs. standard care	481	481	240	16 mo (median)	85	78	102	52	40	21	37	27	14	15	13	7
CRESCENT ³⁴	CCTA vs. functional testing	242	108	na	1 y (mean)	29	12	na	21	7	na	15	7	na	6	0	na
Zacharias K., et al. ⁶²	Stress Echo vs. exercise ECG	191	194	na	21 mo (mean)	9	14	na	9	9	na	nd	nd	na	nd	nd	na
PROMISE ³⁵	CCTA vs. functional testing	4996	5007	na	25 mo (median)	609	406	na	311	158	na	239	120	na	72	38	na
SCOT-HEART ^{63,64}	CCTA vs. standard care	2073	2073	na	2 y (median)	255	260	na	233	201	na	184	160	na	54	45	na
Laiq Z., et al. ⁶⁵	RTMCE vs. stress Echo	792	857	na	3 y (median)	nd	nd	na	53	34	na	34	18	na	19	16	na
CAPP ⁶⁶	CCTA vs. exercise ECG	250	250	na	1 year	66	51	na	37	19	na	29	12	na	8	7	na
Porter TR., et al. ⁶⁷	RTMCE vs. stress Echo	1028	1035	na	3 y (median)	145	81	na	81	33	na	55	21	na	26	12	na
Min JK., et al. ⁶⁸	CCTA vs. SPECT-MPI	91	89	na	55 days (mean)	12	7	na	7	1	na	nd	nd	na	nd	nd	na
WOMEN ⁶⁹	SPECT-MPI vs. exercise ECG	412	412	na	2 years	136	115	na	9	4	na	nd	nd	na	nd	nd	na
Sabharwal NK., et al. ⁷⁰	SPECT-MPI vs. exercise ECG	250	207	na	22 mo (median)	41	98	na	27	37	na	27	37	na	nd	nd	na

				Overall death 1	Overall death 2	Overall death 3	Cardiac death 1	Cardiac death 2	Cardiac death 3	MI 1	MI 2	MI 3	Downstream testing 1	Downstream testing 2	Downstream testing 3		
Low-risk acute coronary syndrome																	
BEACON ⁴¹	CCTA vs. standard care	250	250	na	1 mo	1	0	na	0*	0*	na	14	14	na	10	26	na
Levsky JM., et al. ⁴²	CCTA vs. SPECT-MPI	200	200	na	40 mo (median)	1	6	na	nd	nd	na	3*	6*	na	81	83	na
CT-COMPARE ⁴³	CCTA vs. exercise ECG	322	240	na	1 y	0	0	na	nd	nd	na	3	1	na	35	14	na
CATCH ^{44,45}	CCTA vs. standard care	299	301	na	19 mo (median)	2*	5*	na	0	1	na	1	7	na	104*	68*	na
Lim SH., et al. ⁴⁶	SPECT-MPI vs. standard care	1126	564	na	1 y	nd	nd	na	4	1	na	0	0	na	194	400	na
Miller CD., et al. ⁴⁷	CMR vs. standard care	52	53	na	3 mo	0	0	na	0	0	na	0	0	na	2	9	na
ROMICAT-II ⁴⁸	CCTA vs. standard care	501	499	na	28 days	0	0	na	0	0	na	1	4	na	159	437	na
ACRIN-PA ^{37,38}	CCTA vs. standard care	929	463	na	30 days	2	3	na	1	0	na	12	7	na	405	429	na
CT-STAT ⁴⁹	CCTA vs. SPECT-MPI	375	374	na	6 mo	0	0	na	0	0	na	1	5	na	nd	nd	na
Miller AH., et al. ⁵⁰	CCTA vs. standard care	30	30	na	3 mo	0	0	na	0	0	na	nd	nd	na	11	17	na
Miller CD., et al. ^{51,52}	CMR vs. standard care	52	57	na	1 y	0	0	na	0	0	na	2	1	na	51	53	na
Nucifora G., et al. ⁵³	Stress Echo vs. exercise ECG vs. standard care	77	75	55	2 mo	0	0	0	0	0	0	0	0	0	13	16	35
Chang SA., et al. ⁵⁴	CCTA vs. standard care	133	133	na	1 mo	0	0	na	0	0	na	0	1	na	nd	nd	na
Goldstein JA., et al. ⁵⁵	CCTA vs. standard	99	98	na	6 mo	0	0	na	0	0	na	0	0	na	2	7	na

	care													
Jeetley P., et al. ⁵⁶	Stress Echo vs. exercise ECG	215	218	na	9 mo (median)	1	1	na	0	0	na	5*	3*	na
Nucifora G., et al. ⁵⁷	Stress Echo vs. exercise ECG	110	89	na	2 mo	1*	0*	na	1*	0*	na	3*	1*	na
Jeetley P., et al. ⁵⁸	Stress Echo vs. exercise ECG	148	154	na	9 mo (mean)	1	1	na	nd	nd	na	1	2	na
Udelson JE., et al. ⁵⁹	SPECT-MPI vs. standard care	1215	1260	na	1 mo	4	2	na	nd	nd	na	nd	nd	na

Stable coronary artery disease														
IAEA-SPECT/CTA ⁶⁰	CCTA vs. SPECT-MPI	152	151	na	12 mo	1	0	na	nd	nd	na	1	2	na
CE-MARC 2 ⁶¹	CMR vs. SPECT-MPI vs. standard care	481	481	240	16 mo (median)	4	3	3	1	1	3	5	2	2
CRESCENT ³⁴	CCTA vs. functional testing	242	108	na	1 y (mean)	2	2	na	0*	0*	na	1	1	na
Zacharias K., et al. ⁶²	Stress Echo vs. exercise ECG	191	194	na	21 mo (mean)	1	0	na	1	0	na	0	0	na
PROMISE ³⁵	CCTA vs. functional testing	4996	5007	na	25 mo (median)	74	75	na	71*	84*	na	30	40	na
SCOT-HEART ^{63,64}	CCTA vs. standard care	2073	2073	na	2 y (median)	17	20	na	4	7	na	22	35	na
Laiq Z., et al. ⁶⁵	RTMCE vs. stress Echo	792	857	na	3 y (median)	29	33	na	nd	nd	na	7	5	na
CAPP ⁶⁶	CCTA vs. exercise ECG	250	250	na	1 year	1	0	na	0	0	na	1*	2*	na
Porter TR., et al. ⁶⁷	RTMCE vs. stress Echo	1028	1035	na	3 y (median)	nd	nd	na	nd	nd	na	nd	nd	na
Min JK., et al. ⁶⁸	CCTA vs. SPECT-MPI	91	89	na	55 days (mean)	0	0	na	0	0	na	0	0	na
WOMEN ⁶⁹	SPECT-MPI vs. exercise ECG	412	412	na	2 years	nd	nd	na	nd	nd	na	nd	nd	na

Sabharwal NK., et al. ⁷⁰	SPECT-MPI vs. exercise ECG	250	207	na	22 mo (median)	2	2	na	0	1	na	nd	nd	na	41	146	na
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*unpublished data provided from principal investigators.